

**ABSTRACT**

The present invention provides stable radiopharmaceutical compositions including a therapeutic radionuclide and an effective stabilizing amount of an aromatic stabilizer (e.g., a polyhydroxylated aromatic compound, an aromatic amine, or a hydroxylated aromatic amine), alone or in combination with other antioxidants or stabilizers, to inhibit radiolytic degradation of radiopharmaceuticals. The present invention also provides improved radiopharmaceutical formulations by the use of an aromatic stabilizing agent (e.g., a polyhydroxylated aromatic compound, an aromatic amines, or a hydroxylated aromatic amine), and/or low temperature storage. The present invention also provides processes for making stable radiopharmaceutical compositions. The present invention also provides the use of the pharmaceutical compositions in medical therapy and/or medical diagnosis.